



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 432-4 05-045-24465
S:3 T:6S R:94W Garfield CO

CallSheet #: 82769
Proposal #: 62063



LONG STRING Post Job Report

Attention: Mr. Dustin Childers | (936) 524-8828 | dchilders@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Dustin Childers,

Thank you for the opportunity to provide cementing services on this well. American Cementing strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact American Cementing at any time.

Sincerely,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1157

Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36	n/a	0	1134	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1134	8267	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8267	11053	45
Casing	Inner	4.5	4	11.6	n/a	0	11053	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Field Storage Silo	FSS(CTS)-470			
Field Storage Silo	FSS(CTS)-438			
AS Cement Trailer Float	CTF-901	TRC(TRB)-112	Wall, Lynn	
AS Cement Trailer Float	CTF-9309	TRC(TRB)-188	Bonin, Matthew	
AS Cement Trailer Float	CTF-9299	TRC(TRB)-188	Bonin, Matthew	
Cement Trailer Float	CTF-249	TRC(TRB)-180	Bradbrook, Jeremy	Dragon, Shane
Cement Pump Float	CPF-058	TRH-959	Hale, Jason	
Light Duty Vehicles	LDV-061		Aden, Mark	

Timing

Event	Date/Time
Call Out	8/4/2022 10:15
Depart Facility	8/4/2022 14:30
On Location	8/4/2022 15:14
Rig Up Iron	8/4/2022 16:35
Job Started	8/4/2022 20:44
Job Completed	8/4/2022 22:38
Rig Down Iron	8/4/2022 22:50
Depart Location	8/4/2022 23:45

General Job Information

Metrics	Value
Well Fluid Density	11.1 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	900 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	171 bbls
Actual Displacement	171 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	N/A

Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	0 units
Flare During Job	No
Flare During Job	0 units
Flare at End of Job	No
Flare at End of Job	0 units
Well Full Prior to Job	Yes
Well Fluid Density Into Well	11.1 lb/gal
Well Fluid Density Out of Well	11.1 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	183 °F
BHST	253 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	71.7 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	425 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	0 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced
No

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			42.00		10.00	6188
2	Mud Flush	Flush	8.45			40.86		20.00	6314
3	Water	Flush	8.34			42.00		10.00	6566
4	12.7 Lead	Lead	12.70	2.00	10.99		423.00	150.85	6692
5	14.2 Tail	Tail	14.20	1.72	8.09		660.00	202.34	8590
6	Displacement	DisplacementFinal	8.34			42.00		173.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
2	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
4	Lead	12.7 Lead	ASTM TYPE I/II	Cement	100.00	%
4	Lead	12.7 Lead	BA-90	BondEnhancer	3.00	lb/sk
4	Lead	12.7 Lead	FL-66	FluidLoss	0.50	%BWOB
4	Lead	12.7 Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	12.7 Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	12.7 Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	12.7 Lead	R-3	Retarder	0.45	%BWOB
4	Lead	12.7 Lead	STATIC FREE	Other	0.01	lb/sk
5	Tail	14.2 Tail	CLASS G	Cement	80.00	%
5	Tail	14.2 Tail	FLY ASH (POZZOLAN)	Extender	20.00	%
5	Tail	14.2 Tail	FL-66	FluidLoss	0.40	%BWOB
5	Tail	14.2 Tail	FP-24	Defoamer	0.30	%BWOB
5	Tail	14.2 Tail	GW-86	Viscosifier	0.10	%BWOB
5	Tail	14.2 Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
5	Tail	14.2 Tail	R-3	Retarder	0.15	%BWOB
5	Tail	14.2 Tail	S-8	StrengthRetrogression	27.00	%BWOB

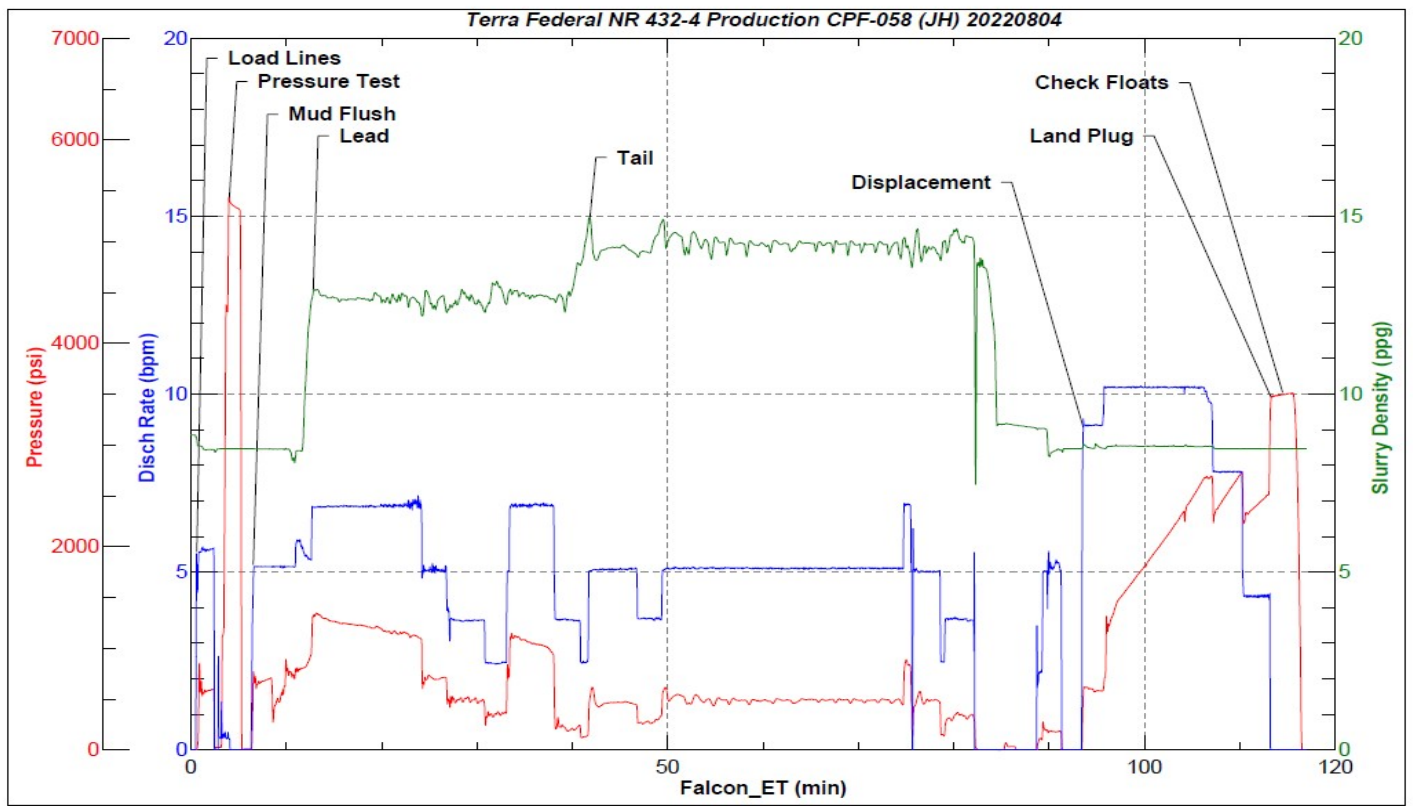
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	8/4/2022	10:15					Yard call 13:00 on location 16:30
2	Depart For Location	8/4/2022	14:30					Leave Rifle yard for location
3	Arrive On Location	8/4/2022	15:14					Arrive on location, rig running casing.
4	Spot Equipment	8/4/2022	16:20					Spot in all Equipment
5	Rig Up Iron	8/4/2022	16:35					Pre rig up safety meeting, rig in all equipment and lines to standpipes
6	Safety Meeting	8/4/2022	20:00					Pre job safety meeting with company man, and rig crew
7	End Circulation	8/4/2022	20:30					Rig ended circulation, circulated for 1.5 hours, total of 900 BBLS
8	Rig Up Iron	8/4/2022	20:30					Rig up cement head and lines on the floor
9	Pump Spacer	8/4/2022	20:44	8.34	5.5	10	820	Pumping freshwater spacer to load lines
10	Pressure Test Lines	8/4/2022	20:47				5000	Pressure test
11	Pump Spacer	8/4/2022	20:50	8.45	5	20	670	Pumping mud flush spacer
12	Pump Spacer	8/4/2022	20:54	8.34	5	10	764	Pumping freshwater spacer
13	Pump Lead Cement	8/4/2022	20:56	12.7	5.5	0	929	Pumping lead cement, returns
14	Pump Lead Cement	8/4/2022	21:03	12.7	7	50	1199	Pumping lead cement
15	Pump Lead Cement	8/4/2022	21:12	12.7	4	100	514	Pumping lead cement
16	Pump Lead Cement	8/4/2022	21:23	12.7	4	151	228	Pumping lead cement
17	Pump Tail Cement	8/4/2022	21:24	14.2	4	0	210	Pumping tail cement, returns
18	Pump Tail Cement	8/4/2022	21:35	14.2	5	50	537	Pumping tail cement
19	Pump Tail Cement	8/4/2022	21:44	14.2	5	100	492	Pumping tail cement
20	Pump Tail Cement	8/4/2022	21:54	14.2	5	150	490	Pumping tail cement
21	Pump Tail Cement	8/4/2022	22:06	14.2	3.5	202	349	Pumping tail cement
22	Clean Pumps and Lines	8/4/2022	22:09					Clean pump and lines to pit
23	Drop Top Plug	8/4/2022	22:17					Drop top plug verified by company man
24	Pump Displacement	8/4/2022	22:18	8.34	9	0	600	Pumping KCL displacement, returns
25	Pump Displacement	8/4/2022	22:23	8.34	10	50	1691	Pumping KCL displacement
26	Pump Displacement	8/4/2022	22:28	8.34	10	100	2326	Pumping KCL displacement
27	Pump Displacement	8/4/2022	22:34	8.34	8	150	2692	Pumping KCL displacement
28	Pump Displacement	8/4/2022	22:38	8.34	4	171	2512	Pumping KCL displacement
29	Land Plug	8/4/2022	22:38				3480	Land plug: FCP 2512 PSI bumped to 3480 PSI
30	Check Floats	8/4/2022	22:40					Bled pressure, floats held, 2.25 BBLS bled back.
31	Rig Down Iron	8/4/2022	22:50					Pre rig down safety meeting. Rig down cement head and lines on the floor.
32	Depart Location	8/4/2022	23:45					Leave location for Rifle shop

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 82769
Customer: Terra
Well Name: Federal NR 432-4



Job Start: Thursday, August 04, 2022